

Chapter 3 – Equipment Specific Permit Conditions

I. Process 1 – Sawmill Line

A. Equipment Item No. 16 – East Cyclone with blower motor abating the saw filers.

1. Basic Equipment

Abatement: Plant Schematic Permit No.96-53

Make:

Model:

Serial No:

Power source: Electricity

Design Rate: 15 hp

Comments:

2. Control Equipment - NA

3. Monitoring Equipment - None

4. Emissions Limitations

a. Particulate Matter

i. Particulate loading

PERMITTEE shall not cause to be discharged particulate matter into the atmosphere in excess of 0.20 gr/dscf (0.46 grams per dry standard cubic meter) of exhaust gas.

ii. Visible emissions

PERMITTEE shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity for any period or periods aggregating more than 3 minutes in any one hour period.

b. Carbon Monoxide - NA

c. Nitrogen Oxides - NA

d. Sulfur oxides - NA

e. Hydrocarbons - NA

f. HAPs - NA

[Auth. §I(A)(4): MCAQMD Permit No. 0120-1-20-96-53]

5. Periodic monitoring

a. Particulate Matter {District}

i. Particulate loading

PERMITTEE shall conduct performance testing for particulate material once within the first year of the permit period. Particulate emissions shall be monitored using Oregon DEQ Method 8.

ii. Visible emissions

PERMITTEE shall conduct performance testing for visible emissions once per quarter. Visible emissions shall be monitored using EPA Method 22 of 40 CFR Part 60 App. A modified to allow observation of the exhaust duct of the cyclone. If visible emissions are observed, the PERMITTEE shall conduct testing using EPA Method 9 or other EPA approved method.

- b. Carbon Monoxide - NA
- c. Nitrogen Oxides - NA
- d. Sulfur oxides - NA
- e. Hydrocarbons - NA
- f. HAPs - NA

[Auth. §I(A)(5): MCAQMD Regulation 5, Rule 5.620]

6. Reporting and Record Keeping

- a. PERMITTEE shall report the results of all tests conducted under the requirements of §5(a)(i) above within 60 days of the completion of the test.
- b. PERMITTEE shall maintain a record of visible emissions inspections conducted under the requirements of §5(a)(ii) above. The record shall include:
 - i. Name of observer
 - ii. Date of inspection
 - iii. Results of observation
 - iv. Method of observation

[Auth. §I(A)(6): MCAQMD Regulation 5, Rule 5.455]

7. Operating Conditions **{District}**

- a. PERMITTEE shall operate and maintain the equipment according to manufacturer's specifications.
- b. Sawdust/wood shavings or other particulate material collected in the cyclone control device(s) shall be discharged only into closed containers. No container shall be filled beyond its capacity.
- c. PERMITTEE shall operate equipment with access covers and inspection hatches sealed. Containment bins and hopper doors shall be closed during operation to prevent fugitive emissions.

[Auth. §I(A)(7): MCAQMD Permit No. 0120-1-20-96-53]

B. Equipment Item No. 17 – West Cyclone with blower motor abating the saw fillers.

1. Basic Equipment

Abatement: Plant Schematic Permit No.96-54

Make:

Model:

Serial No:

Power source: Electricity

Design Rate: 15 hp

Comments:

2. Control Equipment - NA

3. Monitoring Equipment - None

4. Emissions Limitations **{District}**

a. Particulate Matter

i. Particulate loading

PERMITTEE shall not cause to be discharged particulate matter into the atmosphere in excess of 0.20 gr/dscf (0.46 grams per dry standard cubic meter) of exhaust gas.

ii. Visible emissions

PERMITTEE shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity for any period or periods aggregating more than 3 minutes in any one hour period.

b. Carbon Monoxide - NA

c. Nitrogen Oxides - NA

d. Sulfur oxides - NA

e. Hydrocarbons - NA

f. HAPs - NA

[Auth. §I(A)(4): MCAQMD Permit No. 0120-1-20-96-53]

5. Periodic monitoring

a. Particulate Matter **{District}**

i. Particulate loading

PERMITTEE shall conduct performance testing for particulate material once within the first year of the permit period. Particulate emissions shall be monitored using Oregon DEQ Method 8.

ii. Visible emissions

PERMITTEE shall conduct performance testing for visible emissions once per quarter. Visible emissions shall be monitored using EPA Method 22 of 40 CFR Part 60 App. A modified to allow observation of the exhaust duct of the cyclone. If visible emissions are observed, then PERMITTEE shall conduct testing using EPA Method 9 or other EPA approved method.

- b. Carbon Monoxide - NA
- c. Nitrogen Oxides - NA
- d. Sulfur oxides - NA
- e. Hydrocarbons - NA
- f. HAPs - NA

[Auth. §I(A)(5): MCAQMD Regulation 5, Rule 5.620]

6. Reporting and Record Keeping

- a. PERMITTEE shall report the results of all tests conducted under the requirements of §5(a)(i) above within 60 days of the completion of the test.
- b. PERMITTEE shall maintain a record of visible emissions inspections conducted under the requirements of §5(a)(ii) above. The record shall include:
 - i. Name of observer
 - ii. Date of inspection
 - iii. Results of observation
 - iv. Method of observation

[Auth. §I(A)(6): MCAQMD Regulation 5, Rule 5.455]

7. Operating Conditions

- a. PERMITTEE shall operate and maintain the equipment according to manufacturer's specifications.
- b. Sawdust/wood shavings or other particulate material collected in the cyclone control device(s) shall be discharged only into closed containers. No container shall be filled beyond its capacity.
- c. PERMITTEE shall operate equipment with access covers and inspection hatches sealed. Containment bins and hopper doors shall be closed during operation to prevent fugitive emissions.

[Auth. §I(A)(7): MCAQMD Permit No. 0120-1-20-96-53]

II Process 2 – Planing Mill Line

A. Equipment Item No. 28 – Cyclone with blower motor abating Planing Mill and Fence Line equipment

1. Basic Equipment

Abatement: Plant Schematic Permit No. 95-25

Make:

Model:

Serial No:

Power source: Electricity

Design Rate: 20 hp

Comments:

2. Control Equipment - NA

3. Monitoring Equipment - None

4. Emissions Limitations **{District}**

a. Particulate Matter

i. Particulate loading

PERMITTEE shall not cause to be discharged particulate matter into the atmosphere in excess of 0.20 gr/dscf (0.46 grams per dry standard cubic meter) of exhaust gas.

ii. Visible emissions

PERMITTEE shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity for any period or periods aggregating more than 3 minutes in any one hour period.

b. Carbon Monoxide - NA

c. Nitrogen Oxides - NA

d. Sulfur oxides - NA

e. Hydrocarbons - NA

f. HAPs - NA

[Auth. §I(A)(4): MCAQMD Permit No. 0120-1-20-96-53]

5. Periodic monitoring

a. Particulate Matter **{District}**

i. Particulate loading

PERMITTEE shall conduct performance testing for particulate material once during the first year of the permit term and once during the third year of the permit term. Particulate emissions shall be monitored using Oregon DEQ Method 8. If the compliance test result of the first test is less than one-half the permitted standard, then the District may waive the second compliance test.

ii. Visible emissions

PERMITTEE shall conduct performance testing for visible emissions once per quarter. Visible emissions shall be monitored using EPA Method 22 of 40

CFR Part 60 App. A modified to allow observation of the exhaust duct of the cyclone. If visible emissions are observed, then PERMITTEE shall conduct testing using EPA Method 9 or other EPA approved method.

- b. Carbon Monoxide - NA
- c. Nitrogen Oxides - NA
- d. Sulfur oxides - NA
- e. Hydrocarbons - NA
- f. HAPs - NA

[Auth. §I(A)(5): MCAQMD Regulation 5, Rule 5.620]

6. Reporting and Record Keeping

- a. PERMITTEE shall report the results of all tests conducted under the requirements of §5(a)(i) above within 60 days of the completion of the test.
- b. PERMITTEE shall maintain a record of visible emissions inspections conducted under the requirements of §5(a)(ii) above. The record shall include:
 - i. Name of observer
 - ii. Date of inspection
 - iii. Results of observation
 - iv. Method of observation

[Auth. §I(A)(6): MCAQMD Regulation 5, Rule 5.455]

7. Operating Conditions **{District}**

- a. PERMITTEE shall operate and maintain the equipment according to manufacturer's specifications.
- b. Sawdust/wood shavings or other particulate material collected in the cyclone control device(s) shall be discharged only into closed containers. No container shall be filled beyond its capacity.
- c. PERMITTEE shall operate equipment with access covers and inspection hatches sealed. Containment bins and hopper doors shall be closed during operation to prevent fugitive emissions.

[Auth. §I(A)(7): MCAQMD Permit No. 0120-1-20-96-53]

B. Equipment Item No. 29 – Cyclone with blower motor abating the conveyor to the shavings bin.

1. Basic Equipment

Abatement: Plant Schematic Permit No. 85-29

Make:

Model:

Serial No:

Power source: Electricity

Design Rate: 15 hp

Comments:

2. Control Equipment - NA

3. Monitoring Equipment - None

4. Emissions Limitations **{District}**

a. Particulate Matter

i. Particulate loading

PERMITTEE shall not cause to be discharged particulate matter into the atmosphere in excess of 0.20 gr/dscf (0.46 grams per dry standard cubic meter) of exhaust gas.

ii. Visible emissions

PERMITTEE shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity for any period or periods aggregating more than 3 minutes in any one hour period.

b. Carbon Monoxide - NA

c. Nitrogen Oxides - NA

d. Sulfur oxides - NA

e. Hydrocarbons - NA

f. HAPs - NA

[Auth. §I(A)(4): MCAQMD Permit No. 0120-1-20-96-53]

5. Periodic monitoring

a. Particulate Matter **{District}**

i. Particulate loading

PERMITTEE shall conduct performance testing for particulate material once per year. Particulate emissions shall be monitored using Oregon DEQ Method 8. If the compliance test result is less than one-half the permitted standard, then the District may waive the next year compliance test.

ii. Visible emissions

PERMITTEE shall conduct performance testing for visible emissions once per quarter. Visible emissions shall be monitored using EPA Method 22 of 40 CFR Part 60 App. A modified to allow observation of the exhaust duct of the

cyclone. If visible emissions are observed, then PERMITTEE shall conduct testing using EPA Method 9 or other EPA approved method.

- b. Carbon Monoxide - NA
- c. Nitrogen Oxides - NA
- d. Sulfur oxides - NA
- e. Hydrocarbons - NA
- f. HAPs - NA

[Auth. §I(A)(5): MCAQMD Regulation 5, Rule 5.620]

6. Reporting and Record Keeping

- a. PERMITTEE shall report the results of all tests conducted under the requirements of §5(a)(i) above within 60 days of the completion of the test.
- b. PERMITTEE shall maintain a record of visible emissions inspections conducted under the requirements of §5(a)(ii) above. The record shall include:
 - i. Name of observer
 - ii. Date of inspection
 - iii. Results of observation
 - iv. Method of observation

[Auth. §I(A)(6): MCAQMD Regulation 5, Rule 5.455]

7. Operating Conditions **{District}**

- a. PERMITTEE shall operate and maintain the equipment according to manufacturer's specifications.
- b. Sawdust/wood shavings or other particulate material collected in the cyclone control device(s) shall be discharged only into closed containers. No container shall be filled beyond its capacity.
- c. PERMITTEE shall operate equipment with access covers and inspection hatches sealed. Containment bins and hopper doors shall be closed during operation to prevent fugitive emissions.

[Auth. §I(A)(7): MCAQMD Permit No. 0120-1-20-96-53]

III. Process 3 – Fence Line

A. Equipment Item No. 38 – Cyclone with blower motor abating the Fence Line chipper and shaker screen

1. Basic Equipment

Abatement: Plant Schematic Permit No. 76-10

Make:

Model:

Serial No:

Power source: Electricity

Design Rate: 20 hp

Comments:

2. Control Equipment - NA

3. Monitoring Equipment - None

4. Emissions Limitations **{District}**

a. Particulate Matter

i. Particulate loading

PERMITTEE shall not cause to be discharged particulate matter into the atmosphere in excess of 0.20 gr/dscf (0.46 grams per dry standard cubic meter) of exhaust gas.

ii. Visible emissions

PERMITTEE shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity for any period or periods aggregating more than 3 minutes in any one hour period.

b. Carbon Monoxide - NA

c. Nitrogen Oxides - NA

d. Sulfur oxides - NA

e. Hydrocarbons - NA

f. HAPs - NA

[Auth. §I(A)(4): MCAQMD Permit No. 0120-1-20-96-53]

5. Periodic monitoring

a. Particulate Matter **{District}**

i. Particulate loading

PERMITTEE shall conduct performance testing for particulate material once per year. Particulate emissions shall be monitored using Oregon DEQ Method 8. If the compliance test result is less than one-half the permitted standard, then the District may waive the next year compliance test.

ii. Visible emissions

PERMITTEE shall conduct performance testing for visible emissions once per quarter. Visible emissions shall be monitored using EPA Method 22 of 40 CFR Part 60 App. A modified to allow observation of the exhaust duct of the cyclone. If visible emissions are observed, then PERMITTEE shall conduct testing using EPA Method 9 of 40 CFR Part 60 App. A or other EPA approved method.

- b. Carbon Monoxide - NA
- c. Nitrogen Oxides - NA
- d. Sulfur oxides - NA
- e. Hydrocarbons - NA
- f. HAPs - NA

[Auth. §I(A)(5): MCAQMD Regulation 5, Rule 5.620]

6. Reporting and Record Keeping

- a. PERMITTEE shall report the results of all tests conducted under the requirements of §5(a)(i) above within 60 days of the completion of the test.
- b. PERMITTEE shall maintain a record of visible emissions inspections conducted under the requirements of §5(a)(ii) above. The record shall include:
 - i. Name of observer
 - ii. Date of inspection
 - iii. Results of observation
 - iv. Method of observation

[Auth. §I(A)(6): MCAQMD Regulation 5, Rule 5.455]

7. Operating Conditions **{District}**

- a. PERMITTEE shall operate and maintain the equipment according to manufacturer's specifications.
- b. Sawdust/wood shavings or other particulate material collected in the cyclone control device(s) shall be discharged only into closed containers. No container shall be filled beyond its capacity.
- c. PERMITTEE shall operate equipment with access covers and inspection hatches sealed. Containment bins and hopper doors shall be closed during operation to prevent fugitive emissions.

[Auth. §I(A)(7): MCAQMD Permit No. 0120-1-20-96-53]

IV Process 4 – Powerhouse Line

A. Equipment Item No. 46 – Boiler No. 1

1. Basic equipment

Source: Wood waste stoker steam boiler
Make: Riley Stoker
Model:
Serial No:
Power source: Wood bark, back-up oil
Design Rate: 143MMBtu/hr (wood bark rating)
Burner design: Stoker, fixed grate
Comments: Nominal flue gas characteristics: 160F; 57,279 SCFM; 39,504 DSCFM; 31% H₂O; 14.7% CO₂

2. Control Equipment - Multiclones, and wet scrubber (E38)

3. Monitoring Equipment – Steam production rates

4. Emissions Limitations

a. Particulate Matter

i. Particulate loading –

PERMITTEE shall not cause to be discharged particulate matter into the atmosphere in excess of 0.20 gr/scf (0.46 grams per standard cubic meter) of exhaust gas, calculated to 12 percent carbon dioxide (CO₂) determined by CARB Method 5 total catch.

[Auth §IV(A)(4)(a)(i): Federal 40 CFR 60.42(a)(1); MCAQMD Regulation 1, Rule 420(b), MCAQMD Permit No. 0120-1-20-76-20-1]

ii. Visible emissions –

PERMITTEE shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity for any period or periods aggregating more than 3 minutes in any one hour period. The opacity standard applies at all times except for periods of start-up, shutdown, and malfunction.—The standard shall not be exceeded during start-up, shutdown, or malfunction for more than 30 minutes in any rolling twenty-four (24) hour period.

[Auth §IV(A)(4)(a)(ii): H&SC 41704(n), MCAQMD Regulation 1, Rule 410(b), MCAQMD Permit No. 0120-1-20-76-20-1]

b. Carbon Monoxide – NA

c. Nitrogen Oxides – NA

d. Sulfur Oxides - NA

e. Hydrocarbons – NA

f. HAPs– (Note: Limited by individual metals content limits on purchased demolition wood waste fuel under §V(A)(3)-(5).)

5. Periodic monitoring

All periodic monitoring tests will be conducted at the maximum rated operating capacity of the unit plus or minus 10%. The following methods shall be used for determining compliance with the above emissions limitations:

a. Particulate Matter

i. Particulate loading –

PERMITTEE shall conduct performance testing for particulate material once per year. Particulate emissions shall be monitored using CARB Method 5. If the compliance test result is less than one-half the permitted standard, then the District may waive the next year compliance test.

ii. Visible emissions –

PERMITTEE shall conduct performance testing for visible emissions once per quarter. Visible emissions shall be monitored using EPA Method 9 of 40 CFR Part 60 App. A, or other EPA approved method.

b. Carbon Monoxide -

PERMITTEE shall conduct performance testing for carbon monoxide during each compliance test for particulate emissions. Carbon monoxide shall be monitored using EPA Method 10 of 40 CFR Part 60 App. A, or other EPA approved method.

c. Nitrogen Oxides -

PERMITTEE shall conduct performance testing for nitrogen oxides once per year. Nitrogen oxides shall be monitored using EPA Methods 7-7E of 40 CFR Part 60 App. A, or other EPA approved methods.

d. Sulfur Oxides -

Sulfur oxide emissions shall be monitored by calculating estimated emissions from fuel oil sulfur content and fuel consumption. Fuel oil sulfur content shall be determined by ASTM Method D115-68 or D129-64. PERMITTEE shall conduct the emissions calculations and report the results once per year.

e. Hydrocarbons - NA

f. HAPs

PERMITTEE shall conduct performance testing for heavy metals emissions at the discretion of the District. The District shall not require such testing more frequently than once per annum. Heavy metals emissions shall be monitored using CARB Method 436.

[Auth. §IV(A)(5): MCAQMD Regulation 5, Rule 5.620]

6. Record Keeping and Reporting

Boiler operation records shall be provided to the District on an annual basis and at such other times as deemed necessary. These records shall include:

a. Steam production for the boiler in pounds.

- b. Fuel composition and consumption records as specified in §V(A)
[Auth. §IV (A)(6): MCAQMD Permit No. 0120-1-20-76-20-1]

7. Operating Conditions

- a. PERMITTEE shall use only wood waste products (bark, chips, sawdust, and urban wood waste) as primary fuel with standby use of fuel oil allowed only during periods of grate cleaning, main fuel feed failure, or other bonafide emergencies.
- b. PERMITTEE shall report all equipment malfunctions or breakdowns to the District in accordance with Mendocino County Air Quality Management District Regulation 1, Rule 450.

[Auth. §IV (A)(7)(a) & (b): MCAQMD Permit No. 0120-1-20-76-20-1]

- c. Fuel Limitations (See Section V(A))

B. Equipment Item No. 48 – Boiler No. 2

1. Basic Equipment

Source: Wood waste stoker steam boiler
Make: Riley Stoker
Model:
Serial No:
Power source: Wood bark, back-up oil
Design Rate: 143MMBtu/hr (wood bark rating)
Burner design: Stoker, fixed grate
Comments: Nominal flue gas characteristics: 160F; 57,279 SCFM; 39,504 DSCFM; 31% H₂O; 14.7% CO₂

2. Control Equipment - Multiclones and wet scrubber (E40)

3. Monitoring Equipment – Steam production rates

4. Emissions Limitations

a. Particulate Matter

i. Particulate loading

PERMITTEE shall not cause to be discharged into the atmosphere particulate matter in excess of 0.20 gr/scf (0.46 grams per standard cubic meter) of exhaust gas, calculated to 12 percent carbon dioxide (CO₂)-determined by CARB Method 5 total catch.

[Auth. §IV(B)(4)(a)(i): Federal 40 CFR 60.42(a)(1); MCAQMD Regulation 1, Rule 420(b), MCAQMD Permit No. 0120-1-21-76-21-1]

ii. Visible emissions

PERMITTEE shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity for any period or periods aggregating more than 3 minutes in any one hour period. The opacity standard applies at all times except for periods of start-up, shutdown, and malfunction.—The standard shall not be exceeded during start-up, shutdown, or malfunction for more than 30 minutes in any rolling twenty-four (24) hour period.

[Auth. §IV(B)(4)(a)(ii): H&SC 41704(n), MCAQMD Regulation 1, Rule 410(b), MCAQMD Permit No. 0120-1-21-76-21-1]

b. Carbon Monoxide - NA

c. Nitrogen Oxides – NA

d. Sulfur Oxides - NA

e. Hydrocarbons - NA

- f. HAPs – (Note: Limited by individual metals content limits on purchased demolition wood waste fuel under §V(A)(3)-(5).)

5. Periodic monitoring

All periodic monitoring tests will be conducted at the maximum rated operating capacity of the unit plus or minus 10%. The following methods shall be used for determining compliance with the above emissions limitations:

a. Particulate Matter

i. Particulate loading

PERMITTEE shall conduct performance testing for particulate material once per year. Particulate emissions shall be monitored using CARB Method 5. If the compliance test result is less than one-half the permitted standard, then the District may waive the next year compliance test.

ii. Visible emissions

PERMITTEE shall conduct performance testing for visible emissions once per quarter. Visible emissions shall be monitored using EPA Method 9 of 40 CFR Part 60 App. A or other EPA approved method.

b. Carbon Monoxide -

PERMITTEE shall conduct performance testing for carbon monoxide during each compliance test for particulate emissions. Carbon monoxide shall be monitored using EPA Method 10 of 40 CFR Part 60 App. A, or other EPA approved method.

c. Nitrogen Oxides -

PERMITTEE shall conduct performance testing for nitrogen oxides once per year. Nitrogen oxides shall be monitored using EPA Methods 7-7E of 40 CFR Part 60 App. A or other EPA approved methods.

d. Sulfur Oxides -

Sulfur oxide emissions shall be monitored by calculating estimated emissions from fuel oil sulfur content and fuel consumption. Fuel oil sulfur content shall be determined by ASTM Method D115-68 or D129-64. PERMITTEE shall conduct the emissions calculations and report the results once per year.

e. Hydrocarbons - NA

f. HAPs

PERMITTEE shall conduct performance testing for heavy metals emissions at the discretion of the District, but no more frequently than once per annum. Heavy metals emissions shall be monitored using CARB Method 436.

[Auth. §IV(B)(5): MCAQMD Regulation 5, Rule 5.620]

6. Record Keeping and Reporting

Boiler operation records shall be provided to the District on an annual basis and at such other times as deemed necessary. These records shall include:

- a. Steam production for the boiler in pounds.
- b. Fuel composition and consumption records as specified in §V(A)

[Auth §IV(B)(6): MCAQMD Permit No. 0120-1-201-76-21-1]

7. Operating Conditions

- a. PERMITTEE shall use only wood waste products (bark, chips, sawdust, and hogged urban wood waste) as primary fuel with standby use of fuel oil allowed only during periods of grate cleaning, main fuel feed failure, or other bonafide emergencies.
- b. PERMITTEE shall report all equipment malfunctions or breakdowns to the District in accordance with Mendocino County Air Quality Management District Regulation 1, Rule 450.

[Auth §IV(B)(7)(a) & (b): MCAQMD Permit No. 0120-1-201-76-21-1]

- c. Fuel Limitations (See §V(A))

C. Equipment Item No. 50 – Boiler No. 3

1. Basic Equipment

Source: Wood waste stoker steam boiler with cinder reinjection
Make: Riley Stoker
Model: SAM 150
Serial No:
Power source: Wood bark, back-up oil
Design Rate: 270MMBtu/hr (wood bark rating)
Burner design: Stoker, traveling grate
Comments: 120,000 lbs/hr rated steam capacity using hog fuel wood waste as fuel. Nominal flue gas characteristics: 144F, 76,300 SCFM, 59,000 DSCFM, 22.7% H₂O, 10.4% CO₂

2. Control Equipment - Flyash reinjection, multiclones, and wet scrubber (E41)

3. Monitoring Equipment - Steam production rates

4. Emissions Limitations

a. Particulate Matter

i. Particulate loading

PERMITTEE shall not cause to be discharged into the atmosphere particulate matter in excess of 0.05 grains per dry standard cubic foot corrected to 12 percent carbon dioxide (CO₂) determined by CARB Method 5 front half catch (probe wash plus filter catch).

PERMITTEE shall not cause to be discharged into the atmosphere particulate matter in excess of 0.1 grains per standard cubic foot corrected to 12 carbon dioxide (CO₂) determined by CARB Method 5 (total catch). The particulate standard applies at all times except for periods of start-up, shutdown, and malfunction.

[Auth. §IV(C)(4)(a)(i): Federal 40 CFR 60.43b(c)(1), MCAQMD Permit No. 0120-1-20-82-01-1]

ii. Particulate loading **{District}**

PERMITTEE shall not cause to be discharged into the atmosphere particulate matter in excess of 21.0 lbs/hr (2 hour average) @ 98,000±5,000 pounds steam/hour operating rate.

[Auth. §IV(C)(4)(a)(ii): MCAQMD Permit No. 0120-1-20-82-01-1]

iii. Visible emissions **{District}**

PERMITTEE shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity for any period or periods aggregating more than 3 minutes in any one hour period. The opacity

standard applies at all times except for periods of start-up, shutdown, and malfunction.—The standard shall not be exceeded during start-up, shutdown, or malfunction for more than 30 minutes in any rolling twenty-four (24) hour period.

[Auth. §IV(C)(4)(a)(iv): Federal 40 CFR 60.43b(f), H&SC 41704(n), MCAQMD Regulation 1, rule 410(b)]

b. Carbon Monoxide - NA

c. Nitrogen Oxides – (Note: Limited by steam production and fuel use limits under §IV(C)(7)(a) and §V(A)(1) below.)

[Auth. §IV(C)(4)(c): Federal 40 CFR 60.44b(c)]

d. Sulfur Oxides – (Note: Limited by sulfur content limits on fuel and fuel use limits under §IV(C)(6)(c))

[Auth. §IV(C)(4)(d): Federal 40 CFR 60.44b(c)]

e. Hydrocarbons - NA

f. HAPs – (Note: Limited by individual metals content limits on purchased demolition wood waste fuel under §V(A)(3)-(5).)

5. Monitoring for Compliance

a. Particulate loading

Particulate loading shall be monitored using CARB Method. PERMITTEE shall conduct performance testing for particulate material once per year. If the compliance test result is less than one-half the permitted standard, then the District may waive the next year compliance test.

b. Visible emissions

PERMITTEE shall conduct performance testing for visible emissions once per quarter. Visible emissions shall be monitored using EPA Method 9 of 40 CFR Part 60 App. A or other EPA approved method.

c. Carbon monoxide

PERMITTEE shall conduct performance testing for carbon monoxide during each compliance test for particulate emissions. Carbon monoxide shall be monitored using EPA Method 10 of 40 CFR Part 60 App. A, or other EPA approved method.

d. Nitrogen Oxides

PERMITTEE shall conduct performance testing for nitrogen oxides once per year. Nitrogen oxides shall be monitored using EPA Methods 7-7E of 40 CFR Part 60 App. A, or other EPA approved methods.

e. Sulfur oxides

Sulfur oxide emissions shall be determined by calculating estimated annual emissions from fuel oil sulfur content and fuel consumption. PERMITTEE shall report the results of the calculations once per year. (See §IV(C)(6)(c)(iv) & (v)).

[Auth. §IV(C)(5): MCAQMD Regulation 5, Rule 5.620]

f. HAPS (See also §V(A)(6))

PERMITTEE shall conduct performance testing for heavy metals emissions at the discretion of the District, but no more frequently than once per annum. Heavy metals emissions shall be monitored using CARB Method 436.

6. Record Keeping and Reporting

a. Steam Production

PERMITTEE shall operate and maintain strip chart recorders or equivalent to record steam production rates.

[Auth § IV(C)(6)(a): MCAQMD Permit No. 0120-1-20-82-01-1]

b. Wet scrubber pressure drop

PERMITTEE shall record once daily in a permanent record the wet scrubber flange to flange operating pressure drop.

[Auth § IV(C)(6)(b): MCAQMD Permit No. 0120-1-20-82-01-1]

c. Fuel composition and consumption records as specified in §V(A)

d. Reporting

All records required under this permit shall be available for periodic inspection by the Mendocino Air Quality Management District, the California Air Resources Board, and/or the U.S. Environmental Protection Agency.

[Auth § IV(C)(6)(d): MCAQMD Permit No. 0120-1-20-82-01-1]

7. Operating Conditions

a. Steam Production Limits

- i. PERMITTEE shall not generate steam from the No. 3 Boiler in excess of 140,000 lbs/hr on a 24-hr average.
- ii. PERMITTEE shall not generate steam from the No. 3 Boiler in excess of 98,000 lbs/hr on an annual average.

[Auth §IV(C)(7)(a): MCAQMD Permit No. 0120-1-20-82-01-1]

b. Fuel Limitations (See also §V(A))

Fuel oil may be used as a supplement for no more than 438 hrs/year

[Auth §IV(C)(7)(c) MCAQMD Permit No. 0120-1-20-82-01-1]

D. Equipment Item No. 42 - Cyclone abating conveyor to fuel house

1. Basic Equipment

Abatement: Plant Schematic Permit No. 76-17

Make:

Model:

Serial No:

Power source: Electricity

Design Rate: 20 hp

Comments:

2. Control Equipment- NA

3. Monitoring Equipment - None

4. Emissions Limitations **{District}**

a. Particulate Matter

i. Particulate loading

PERMITTEE shall not discharge particulate matter into the atmosphere in excess of 0.20 gr/dscf (0.46 grams per dry standard cubic meter) of exhaust gas.

ii. Visible emissions

PERMITTEE shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity for any period or periods aggregating more than 3 minutes in any one hour period.

b. Carbon Monoxide - NA

c. Nitrogen Oxides - NA

d. Hydrocarbons - NA

e. HAPs - NA

[Auth. §IV(D)(4): MCAQMD Permit No. 0120-1-20-76-10]

5. Periodic monitoring **{District}**

a. Particulate Matter

i. Particulate loading

PERMITTEE shall conduct performance testing for particulate material once per year. Particulate emissions shall be monitored using Oregon DEQ Method 8. If the compliance test result is less than one-half the permitted standard, then the District may waive the next year compliance test.

ii. Visible emissions

PERMITTEE shall conduct performance testing for visible emissions once per quarter. Visible emissions shall be monitored using EPA Method 22 of 40 CFR Part 60 App. A modified to allow observation of the exhaust duct of the cyclone. If visible emissions are observed, then PERMITTEE shall conduct testing using EPA Method 9 of 40 CFR Part 60 App. A or other EPA approved method.

b. Carbon Monoxide - NA

c. Nitrogen Oxides - NA

d. Sulfur oxides - NA

e. Hydrocarbons - NA

f. HAPs - NA

[Auth. §IV(D)(5): MCAQMD Regulation 5, Rule 5.620]

6. Record Keeping and Reporting

a. PERMITTEE shall report the results of all tests conducted under the requirements of §5(a)(i) above within 60 days of the completion of the test.

b. PERMITTEE shall maintain a record of visible emissions inspections conducted under the requirements of §5(a)(ii) above. The record shall include:

i. Name of observer

ii. Date of inspection

iii. Results of observation

iv. Method of observation

[Auth. §I(A)(6): MCAQMD Regulation 5, Rule 5.455]

7. Operating Conditions **{District}**

a. PERMITTEE shall operate and maintain the equipment according to manufacturer's specifications.

b. Sawdust/wood shavings or other particulate material collected in the cyclone control device(s) shall be discharged only into closed containers. No container shall be filled beyond its capacity.

c. PERMITTEE shall operate equipment with access covers and inspection hatches sealed. Containment bins and hopper doors shall be closed during operation to prevent fugitive emissions.

[Auth. §IV(D)(7): MCAQMD Permit No. 0120-1-20-96-53-9]

V. Plant Wide Special Conditions

A. Fuel Limitations

1. PERMITTEE shall use only wood waste products (bark, chips, and sawdust) as primary fuel.
2. Fuel oil sulfur content shall not exceed 1.75% on a daily average basis nor 1.55% on an annual average basis, as determined by ASTM Method D115-68 or D129-64

[Auth §V(A)(1) & (2): MCAQMD Permit No. 0120-1-20-82-01-1]

3. PERMITTEE shall not burn more than 300 tons per day of demolition wood waste.
4. Each lot of purchased demolition wood waste shall be sampled by a District approved sampling procedure.
5. Metals content in purchased demolition wood waste fuel shall not exceed the following individual limits in milligrams of element per kilogram of demolition wood waste (mg/kg) as determined by US EPA SW846 Methods 3052 (sample preparation) and 6020 (sample analysis):

| | |
|----------------|-----------|
| antimony (Sb) | 0.2 mg/kg |
| arsenic (As) | 0.1 |
| beryllium (Be) | 0.1 |
| cadmium (Cd) | 0.1 |
| chromium (Cr) | 0.1 |
| copper (Cu) | 500 |
| lead (Pb) | 100 |
| manganese (Mn) | 10 |
| mercury (Hg) | 2 |
| nickel (Ni) | 0.5 |
| vanadium (V) | 100 |
| zinc (Zn) | 500 |

[Auth §V(A)(3)-(5): Federal 40 CFR 50.21(i)(8)(i), MCAQMD]

6. Record keeping and reporting:

PERMITTEE shall maintain a permanent record of daily fuel usage that includes:

- i. Wood waste (hogged) fuel consumed, measured in bone dry tons.
- ii. Metals content of each lot of demolition wood waste fuel purchased (see §V(A)(5).
- iii. Demolition wood waste consumed, measured in bone dry tons.
- iv. Fuel oil consumed in U.S. gallons.
- v. Length of time fuel oil consumed.
- vi. Sulfur content of each lot of fuel purchased.
- vii. Estimated annual emissions of heavy metals from demolition wood metals content and demolition wood consumption.

PERMITTEE shall provide the records to the District on an annual basis and at such other times as deemed necessary by the District. The annual period shall be from January through December. The report shall be furnished to the District by February 1 of the year following the reporting period.

[Auth §V(A)(6): MCAQMD Permit No. 0120-1-20-82-01-1]

B. Dust Mitigation Measures {District}

PERMITTEE shall at all times operate the plant, log yard or lumber yard, fuel house truck dump, fuel house beach storage pile area, soil amendment areas, and all supporting activities in such a manner as to minimize fugitive dust emissions and ensure compliance with Mendocino County Air Pollution Control District Regulation 1, Rule 430 (fugitive dust emissions). This requirement shall include but not be limited to:

1. The prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or by other means.
2. The application of asphalt, water, or suitable chemicals on dirt roads, material stockpiles, and other surfaces which can give rise to airborne dust.
3. The paving of roadways and their maintenance in a clean condition.
4. Limiting vehicle speed to not more than 10 mph on unpaved surfaces in the immediate area of the plant.
5. Keeping soil amendment lay-downs damp before and during tilling operations.
6. The appointment and designation by name of a dust control officer. This person shall have the responsibility and requisite authority to ensure that plant operations, including control of fugitive dust emissions, are in compliance with District regulations at all times. PERMITTEE shall provide to the District in writing the name of the person appointed within thirty days of issuance of this permit, and thereafter upon change.

[Auth §V(B): MCAQMD Regulation 1, Rule 430, Permit No. 0120-1-20-76-10-2]

C. Fugitive Emissions Mitigation Measures {District}

PERMITTEE shall inspect all ductwork associated with fugitive dust collection systems for leaks once a month. Any leaks detected shall be repaired within ten days. Any visible accumulation of sawdust on exterior horizontal surfaces (except for storage piles) shall be removed within ten days of discovery.

[Auth §V(C): MCAQMD Regulation 1, Rule 430(a), Permit No. 0120-1-20-76-10-2]

D. Gasoline Storage Tank with Phase II Vapor Recovery {District Only. Not Federally enforceable}

PERMITTEE shall operate the gasoline storage and dispensing system in compliance with District Regulation 3, Rule 1.

[Auth §V(D): MCAQMD Regulation 3, Rule 1, Permit No. 0120-]

E. Cooling Tower

PERMITTEE shall insure that the cooling tower meets all requirements of District Regulation 3, Rule 3.

[Auth §V(E): H&SC §39662, MCAQMD Regulation 3, Rule 3]

F. Maintenance of dust collection systems

PERMITTEE shall maintain in good working order without leaks and operate according to manufacturer's specifications system collection devices (inlets), contaminant transport systems (duct work), air movers (blowers), instrumentation (controls), subsystems (sprays, valves), and material feed and containment systems (hoppers and bins).

[Auth. §V(F): MCAQMD Permit No. 0120-1-20-96-53-9 and others]

G. Risk Management Plan

If the PERMITTEE becomes subject to Federal Risk Management Plan requirements, PERMITTEE shall respond in a timely manner.

[Auth §V(G): 40 CFR 70]